OBJECTIVES: Three formulations of leuprolide, an established LH-RH agonist are used in the management of advanced prostate cancer. In order to inform clinical practice, the economic impact of the different formulations and dosing schedules were evaluated for Austria, Belgium, Czech Republic, Hungary, Italy, Latvia, The Netherlands, Poland and Portugal. **METHODS:** Database searches identified 10 clinical trials of leuprolide 1-monthly (1M), 3-monthly (3M) and 6-monthly (6M) with Atrigel®, requiring 6, 4 and 2 hospital treatment visits respectively. Due to reported comparable efficacy, safety and adherence, cost-minimisation analysis was conducted. Costs of the product, specialist consultations and diagnostics (converted to 2010 euros) were considered during up to 12 months follow-up. The perspective was that of public payers. **RESULTS:** The review showed that with the use of leuprolide 1M, 3M and 6M the respective percentage of patients achieving testosterone suppression of ≤50ng/dl was 93.3%, 98.3% and 97.3% ($p>0.05$). However, 6M was the least cost treatment option, with average total annual costs from 788€ (Poland) to 1839€ (Portugal). The 3M option was 2.5% (Hungary) to 37.6% (Belgium) higher than 6M cost; while 1M formulation had the highest cost: 15.6% and 151.6% more than 6M for those countries, respectively. The 3M option was 11.2% to 45.3% less expensive than 1M. The cost drivers were the frequency of visits for injection and monitoring. The study showed that up to 50% additional visits could be funded with the savings resulting from switching eligible patients from 1M and 3M to 6M. Results were robust in one-way sensitivity analyses, as well as probabilistic sensitivity analysis. **CONCLUSIONS:** Leuprolide acetate with Atrigel® 1M, 3M and 6M formulations offer comparable efficacy and safety. However, driven by the frequency of visits, the 6-monthly formulation offers the greatest cost-savings for prostate cancer patients in the European countries studied.

PCN103

THE ADJUVANT TREATMENT OF STAGE 3 COLON CANCER (ACC): AN INDIRECT COST-MINIMISATION AND POPULATION NET HEALTH BENEFIT ANALYSIS OF CAPECITABINE + OXALIPLATIN (XELOX) VS. IV 5-FU + FA + OXALIPLATIN (FOLFOX)

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OBJECTIVES: XELOX is the most utilised therapy for aCC in the UK. The aim of this analysis was to assess and compare the population net health benefit (pNHB) of all patients with aCC switching from the FOLFOX regimen to XELOX, from a UK National Health Service (NHS) perspective. **METHODS:** An indirect comparison of the NO16968 (XELOX) and MOSAIC (FOLFOX-4) trials was undertaken (where both regimens were compared to i.v. 5-FU plus FA) showing XELOX to be non-inferior. A cost minimisation approach was therefore taken. Drug costs were based on UK list prices taken from the British National Formulary (BNF 61), and additional costs such as administration costs, adverse event costs and pharmacy costs were taken from NHS reference costs, the literature and previous technology appraisals. A £20,000/QALY assumed displacement threshold was utilised to estimate the pNHB provided. Uncertainty was explored via one-way sensitivity analyses. **RESULTS:** Replacing FOLFOX-6 and FOLFOX-4 with XELOX saved £6490 and £9778 per patient respectively, of which £2434 and £1534 came from drug acquisition costs. Over 60% of the total savings were realised from reductions in the frequency of pharmacy use and administration resource use. The savings realised from full implementation of the XELOX regimen could be used by the NHS to generate more than 1000 QALYs over the next 5 years. The costs of AEs were similar across all three regimens. XELOX achieved savings of £3,400 per patient even when all parameters in the sensitivity analysis were simultaneously set to the worse case scenarios. **CONCLUSIONS:** XELOX has been demonstrated to be cost-effective and significantly cost-saving versus FOLFOX-4 and FOLFOX-6 in aCC from an NHS perspective. Full conversion of all aCC patients to XELOX could offer the NHS substantial financial savings and a significant pNHB of over 1000 QALYs over a 5 year period.

PCN104

COST MINIMIZATION ANALYSIS (CMA) OF CAPECITABINE/CISPLATIN (XP) VS. 5-FU/CISPLATIN (FP) REGIMENS IN ADVANCED GASTRIC CANCER (AGC) TREATMENT IN THE ROMANIAN SETTING

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OBJECTIVES: The objective was to compare the first-line therapy costs of capecitabine+cisplatin(XP) and 5-FU+cisplatin (FP) in patients with AGC in the Romanian health care system. **METHODS:** Due to similar efficacy as shown in the study ML 17 032 (Kang et al.) a cost minimization analysis was performed (CMA). Direct costs of the two alternative therapies were estimated based on the trial results on actual dose and the number of administrations, and unit costs in Romanian hospitals from payer perspective (National Health Insurance House). Adverse event (AE) profiles were used to calculate costs of treating AEs. An expert panel estimated typical treatment patterns and costs of treating major AEs. **RESULTS:** XP arm patients received 5.2 cycles vs. 4.6 cycles in FP arm. The substitution of oral capecitabine for infusional 5-FU reduced the number of hospital clinic visits by 17.6 (22.8 for FP versus 5.2 for XP). Drug costs were estimated to be ROL 5,230 greater in the XP arm, but drug administration costs were ROL 5,904 lower, yielding a net cost saving of ROL 674 per patient (1Euro=4,2 ROL). Adverse event profiles were almost similar: associated costs to treat AEs were less than ROL 270 per patient and were lower in the XP arm by ROL 67. Total incremental cost was - ROL 741 in favor of XP regimen. **CONCLUSIONS:** Oral capecitabine treatment is a cost-saving regimen for AGC from Romanian public payer's perspective.

PCN105

ECONOMIC EVALUATION OF PANITUMUMAB AND CETUXIMAB IN THE TREATMENT OF PATIENTS WITH EGFR EXPRESSING MCRC WITH NON-MUTATED (WILD-TYPE) KRAS IN GREECE: A COST MINIMIZATION ANALYSIS

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OBJECTIVES: Metastatic colorectal cancer (mCRC) accounts for a substantial economic and clinical burden worldwide. The aim of the present study was to conduct an economic evaluation in Greece comparing panitumumab with cetuximab in the monotherapy treatment of patients with non-mutated (wild-type) KRAS, epidermal growth factor receptor (EGFR)-expressing mCRC. **METHODS:** Based on literature search, panitumumab and cetuximab are assumed to have similar efficacy, hence a cost-minimization analysis was carried out from the third-payer-party (Sickness Fund) and the National Health Service (NHS) perspective. A probabilistic model was constructed to estimate the resource utilization and costs associated with the management of patients receiving either therapy. Due to known differences in various settings regarding drug use, two type of analysis were undertaken: one reporting "cost per mg" and another reporting "cost per vial". Treatment cost accounted for administration of second line chemotherapy, laboratory and biochemical examinations and for hospitalization due to toxicity. Data on resource utilization were collected from two oncology units in Greece and prices refer to 2011. Non parametric bootstrapping was employed to deal with uncertainty and to estimate variability measures. **RESULTS:** From a third-payer-party perspective, it was found that the mean 20-week total cost per patient for panitumumab and cetuximab in the "per mg analysis" was €16,349 (95%CI: 16,036.7-16,637.8) and €18,242 (95%CI: 17,902.4-18,597.9), respectively. The corresponding mean total costs obtained in "per vial analysis" was €18,808 (95%CI: 18,437.7-19,161.7) and €19,701 (95%CI: 19,358.6-20,053.1), respectively. From the NHS perspective, while the mean total costs per patient were higher than for third party payers, versus cetuximab, panitumumab was still associated with a 12.40% and 17.7% cost reduction in per-vial and per-mg analysis, respectively. **CONCLUSIONS:** In the Greek NHS and Sickness Fund setting, panitimumab may represent a cost-saving option compared with cetuximab in the management of patients with non-mutated (wild-type) KRAS, epidermal growth factor receptor (EGFR)-expressing mCRC.

PCN106

CAPECITABINE PLUS OXALIPLATIN (CAPOX) VERSUS FLUOROURACIL/LEUCOVORIN PLUS OXALIPLATIN (FOLFOX) IN STAGE III COLON CANCER: A COST-MINIMIZATION ANALYSIS BASED ON REAL WORLD COSTS IN THE NETHERLANDS

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OBJECTIVES: Recent publications have demonstrated equal efficacy of capecitabine and fluorouracil/leucovorin in combination with oxaliplatin in the adjuvant treatment of stage III colon cancer. It is stated that CAPOX and FOLFOX can be used interchangeably. **METHODS:** A cost-minimization analysis was performed using a Markov model, a two-year time horizon and a hospital perspective. Assuming equal efficacy of CAPOX and FOLFOX, transition probabilities were based on the MOSAIC trial (Andre et al., 2004 and 2009). Dutch real-world population-based treatment and follow-up cost were calculated using a representative sample of 102 patients treated with oxaliplatin for stage III colon cancer in 19 hospitals in the The Netherlands. Resource use was collected from the first administration of adjuvant chemotherapy until disease progression (or end of follow-up). Costs of drug acquisition, drug administration, patient monitoring, and adverse events were considered and reported in euro 2009. **RESULTS:** In Dutch practice, the median time on adjuvant treatment was 24 weeks for both CAPOX and FOLFOX, as recommended in the guidelines. Mean total costs were € 19,373 for CAPOX and € 31,324 for FOLFOX, resulting in a significant overall cost savings of € 11,951 for CAPOX compared with FOLFOX. Main savings resulted from administration costs (€ 8,460), due to increased hospital admissions in the FOLFOX treatment as the administration of fluorouracil involves a 48-hour continuous infusion. Other savings were obtained from acquisition costs (€ 2181) and costs of managing adverse events (€ 1427). Monitoring costs were comparable in CAPOX and FOLFOX. Probabilistic sensitivity analysis confirmed the robustness of the results. **CONCLUSIONS:** CAPOX is cost-saving in comparison with FOLFOX for the adjuvant treatment of stage III colon cancer in a real-world setting in the The Netherlands. Considering the high incidence of colon cancer in the The Netherlands, substantial overall savings can be realized by routine use of CAPOX in this indication.

PCN107

POTENTIAL BENEFITS OF INTRODUCING A COMPANION DIAGNOSTIC IN ADVANCED NON-SMALL CELL LUNG CANCER

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OBJECTIVES: Gefitinib is a promising first-line treatment option in advanced non-small cell lung cancer (NSCLC) patients with positive epidermal growth factor receptor tyrosine kinase (EGFR-TK) mutations. However, some patients with sensitivé EGFR-TK mutations and primary resistance do not respond to gefitinib treatment. The objective of this early health technology assessment was to quantify the potential health gain and cost consequences that would result with the introduction of a companion diagnostic prior to first-line treatment of advanced NSCLC patients with positive EGFR-TK mutations. **METHODS:** A Markov model was designed to compare a companion diagnostic strategy (gefitinib or gemicitabine-carboplatin) versus treating all patients with gefitinib (gefitinib for all). Model in-